

# Opto-Electronic Devices (NEPOC)

## • Light-Emitting Diodes

| Color    | Package                                          | Type No.        | Material       | $\lambda_p$ (nm) |
|----------|--------------------------------------------------|-----------------|----------------|------------------|
| Red      | TO-18 (Clear Plastic)                            | SR101C          | GaAsP          | 660              |
|          | TO-18 (Clear Glass)                              | SR102           | GaAsP          | 660              |
|          | TO-18 (Red Diffused Plastic)                     | SR104D          | GaAsP          | 660              |
|          | TO-18 (Red Diffused Plastic)                     | SR104DA         | GaAsP          | 660              |
|          | 3 $\phi$ Plastic Molded (Clear Plastic)          | SR505C, SR615C  | GaP, GaAsP (N) | 630              |
|          | 3 $\phi$ Plastic Molded (Red Diffused Plastic)   | SR505D, SR615D  | GaP, GaAsP (N) | 630              |
|          | 5 $\phi$ Plastic Molded (Clear Plastic)          | SR503C, SR513C  | GaP            | 695              |
|          | 5 $\phi$ Plastic Molded (Red Diffused Plastic)   | SR503D, SR513D  | GaP            | 695              |
|          | 5 $\phi$ Plastic Molded (White Diffused Plastic) | SR503W, SR513W  | GaP            | 695              |
|          | 5 $\phi$ Plastic Molded (Red Diffused Plastic)   | SR603D, SR613D  | GaAsP (N)      | 630              |
|          | 5 $\phi$ Plastic Molded (Clear Plastic)          | SR603C, SR613C  | GaAsP (N)      | 630              |
|          | 5 $\phi$ Plastic Molded (White Diffused Plastic) | SR603W, SR613W  | GaAsP (N)      | 630              |
|          |                                                  |                 |                |                  |
| Green    | 5 $\phi$ Plastic Molded (Green Clear Plastic)    | SG203TA, SG213T | GaP            | 565              |
|          | 5 $\phi$ Plastic Molded (Green Diffused Plastic) | SG203DA, SG213D | GaP            | 565              |
|          | TO-18 (Green Diffused Plastic)                   | SG204D          | GaP            | 565              |
|          | 3 $\phi$ Plastic Molded (Green Clear Plastic)    | SG205T, SG215T  | GaP            | 565              |
|          | 3 $\phi$ Plastic Molded (Green Diffused Plastic) | SG205D, SG215D  | GaP            | 565              |
|          |                                                  |                 |                |                  |
| Amber    | 5 $\phi$ Plastic Molded (Amber Clear Plastic)    | SY403TA, SY413T | GaAsP          | 590              |
|          | 5 $\phi$ Plastic Molded (Amber Diffused Plastic) | SY403DA, SY413D | GaAsP          | 590              |
|          | TO-18 (Amber Clear Plastic)                      | SY404T          | GaAsP          | 590              |
|          | TO-18 (Amber Diffused Plastic)                   | SY404D          | GaAsP          | 590              |
|          | 3 $\phi$ Plastic Molded (Amber Clear Plastic)    | SY405T, SY415T  | GaAsP          | 590              |
|          | 3 $\phi$ Plastic Molded (Amber Diffused Plastic) | SY405D, SY415D  | GaAsP          | 590              |
|          |                                                  |                 |                |                  |
| Infrared | TO-18 (Clear Glass)                              | SE301A          | GaAs           | 940              |

( $\phi$  in mm)

## • Photo-Transistors

| Package              | Type No.       | Features                       |
|----------------------|----------------|--------------------------------|
| Small Plastic Molded | PH103<br>PH104 | High sensitivity<br>High speed |
| TO-18 (Clear Glass)  | PT8L           | High reliability               |

## • Photo-Couplers

| Type No. | Package   | Features               |
|----------|-----------|------------------------|
| PS1001   | TO-5      | High reliability       |
| PS2010   | 6-pin DIP | General purpose        |
| PS2021   | 6-pin DIP | " (Viso $\geq 4$ KVac) |
| PS2022   | 6-pin DIP | " (High CTR)           |

## • Photo-Diodes

| Type No. | Package   |
|----------|-----------|
| PH301    | Metal Can |

## • Photo-Interrupters

| Type No. | Width of Slit (mm) |
|----------|--------------------|
| PS4001   | 2.5                |
| PS4003   | 2.5                |
| PS4005   | 4.2                |
| PS4007   | 4.2                |
| PS4008   | 2.5                |
| PS4009   | 4.2                |
| PS4010   | 3.2                |
| PS4011   | 3.0                |

# Thyristors

| Package                |                    | Power Mini Mold | TO-92  |                  | MP7 (TO-202AA) |        |        |      |       |       | MP25 (TO-220AB) |      |      |
|------------------------|--------------------|-----------------|--------|------------------|----------------|--------|--------|------|-------|-------|-----------------|------|------|
| $I_T$ (RMS)            | A                  |                 | 0.47   |                  | 4              | 4      | 4      | 4.7  | 4.7   | 4.7   | 8               | 8    | 12   |
| $I_T$ (AV)             | A                  |                 | 0.3    |                  | 2              | 2.5    | 2      | 3    | 3     | 3     | 5.1             | 5.1  | 8    |
| $I_{TSM}$              | A                  |                 | 8      |                  | 20             | 35     | 20     | 65   | 65    | —     | 80              | —    | 100  |
| $T_J$                  | $^{\circ}\text{C}$ |                 | 125    |                  | 110            | 125    | 110    | 125  | 125   | 125   | 110             | 125  | 125  |
| $V_{DRM}$<br>$V_{RRM}$ | 50                 | V               |        |                  | 2P05M          |        |        |      |       |       | 5P05M           |      |      |
|                        | 60                 |                 |        |                  |                |        |        |      |       |       |                 |      |      |
|                        | 100                |                 | N203YY |                  |                |        |        |      |       |       |                 |      |      |
|                        | 200                |                 | N203A  |                  | 2P1M           |        |        | 3P1M | 3P1MH |       | 5P1M            |      | 8P1M |
|                        | 300                |                 | 03P2J  | N203B            | 2P2M           |        | 2S2M   | 3P2M | 3P2MH |       | 5P2M            |      | 8P2M |
|                        | 400                |                 | N203C  |                  |                |        | 2S3M   |      |       |       |                 |      |      |
|                        | 500                |                 | 03P4J  | N203D            | 03P4MGC        | 2P4M   | 2V5P4M | 2S4M | 3P4M  | 3P4MH | 3S4M            | 5P4M | 5S4M |
|                        | 600                |                 |        | 03P5MGC          | 2P5M           | 2V5P5M |        |      | 3P5M  |       |                 | 5P5M |      |
|                        |                    |                 |        | 03P6MGC          | 2P6M           | 2V5P6M |        |      | 3P6M  |       |                 | 5P6M |      |
| $I_{GT}$               | mA                 | 0.2             | 0.2    | 50 $\mu\text{A}$ | 0.2            | 0.1    | 0.3    | 5    | 0.2   | 30    | 15              | 50   | 15   |
| $t_q$ (TYP.)           | $\mu\text{s}$      | 25              | 15     | 100              | 80             | 80     | 15     | 100  | 100   | 5     | 80              | 5    | 80   |